

## Bar Code Labels



**B**ar codes on supermarket products and other consumer goods have relatively short shelf lives in a benign environment, hence require little special design. But code labels affixed to systems that operate in orbit must maintain high readability for long periods despite exposure to the heat and vibration of launch and the harsh environment of space.

American Bar Codes, Inc. (ABC), Brooklyn, New York, developed special bar code labels, under NASA contract, for inventory control of Space Shuttle parts and other space system components. They combine extreme durability with excel-



lent print contrast ratio, which allows first time accurate reading over a 10-year inventory lifetime of the product. ABC is now producing these bar code labels commercially, for industrial customers who also need labels able to resist harsh environments.

ABC labels are made in a company-developed anodized aluminum process and consecutively marked with bar code symbology and human-readable numbers. They offer extreme abrasion resistance and indefinite resistance to ultraviolet radiation; are capable of withstanding 700 degree Fahrenheit temperatures without deterioration and up to 1400 degrees in special designs; and they offer high resistance to salt spray, cleaning fluids and mild acids. At top, labels exposed to high temperature are still readable although the aluminum base has melted. At lower left, ABC president Nate Moss is using an infrared scanner to check label readability. In the center photo, labels remain readable after an acid immersion test. ▲